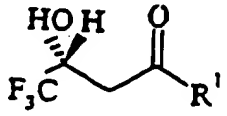
The invention relates to a novel biotechnological process for preparing 4,4,4-trifluoro-3(R)-hydroxybutyric acid derivatives of the general formula

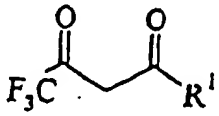


I

4,4,4-trifluoro-3(R)-hydroxybutyric acid derivatives such as ethyl 4,4,4-trifluoro-3(R)-hydroxybutyrate are important intermediates for preparing Befloxatone, a monomine oxidase A inhibitor (EP-A-0 736 606).

On page 2, replace the paragraph on line11-29, with the following paragraph:

According to the invention, the process is carried out by a trifluoroacetoacetic acid derivative of the general formula



II

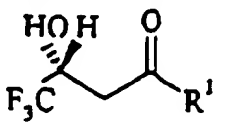
in which

R1 is $-OR^2$, in which R^2 is hydrogen, C_{1-10}-alkyl, C_{2-10}-alkenyl, C_{3-8}-cycloalkyl, aryl, alkoxyalkyl or alkoxyalkoxyalkyl,

$-NR^3R^4$, in which R^3 and R^4 are identical or different and represent hydrogen, C_{1-10}-alkyl C_{2-10}-alkyl, C_{2-10}-alkenyl, C_{3-8}-cycloalkyl or aryl, or

$-SR^5$, in which R^5 is hydrogen, C_{1-10}-alkyl, C_{2-10}-alkenyl, aryl or C_{3-8}-cycloalkyl,

being converted by means of microorganisms which are able to reduce a carbonyl function, or by means of a cell-free enzyme extract of these microorganisms, into the compound of the general formula



I